

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference MA2 03043PCT		FOR FURTHER ACTION	See Form PCT/IPEA/416																								
International application No. PCT/FR2004/001429	International filing date (day/month/year) 09.06.2004	Priority date (day/month/year) 13.06.2003																									
International Patent Classification (IPC) or national classification and IPC																											
Applicant SAINT-GOBAIN GLASS FRANCE																											
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 9 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table border="0"><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>				<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand		Date of completion of this report																									
Name and mailing address of the IPEA/EP		Authorized officer																									
Facsimile No.		Telephone No.																									

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-10 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. 1-14 _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* _____ received by this Authority on _____
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/2-2/2 _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	2-5, 9, 12	YES
	Claims	1, 6-8, 10-11, 13, 14	NO
Inventive step (IS)	Claims		YES
	Claims	1-14	NO
Industrial applicability (IA)	Claims	1-14	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

1. Reference is made to the following document:

D1: EP-A-1 196 018 (HASEGAWA CHEM IND; NISSHIN SPINNING (JP))

2. The application fails to comply with the requirements of PCT Article 6, since claim 1 is unclear.

2.1 Claim 1 has been drafted to cover four embodiments of the invention, but the repeated use of the conjunction "or" and alternative terms renders the subject matter of claim 1 unclear. It is difficult to determine the subject matter for which protection is sought.

2.2 The wording of claim 1 may nevertheless be broken down into four separate statements covering each embodiment.

2.21 First statement (illustrated by figure 2)

An electromagnetic shielding structure comprising:

- a first transparent substrate (20);
- a conductive element (30) deposited on a transparent supporting sheet (31) made of plastic;
- a transparent bonding sheet (22) made of plastic, which ensures that the conductive element (30) is attached to the substrate (20) by joining the supporting sheet (31) to the bonding sheet (22) on the conductive element side;
- an additional transparent sheet (23), which is attached to the surface of the supporting sheet (31) opposite the one to

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which the bonding sheet (22) is attached;

- electrical connecting means (40) intended to be connected to the conductive element (30) for grounding the latter;

which structure is characterised in that:

- on at least one of its sides, the bonding sheet (22) is set back towards the inside of the structure relative to the corresponding free edge of the transparent substrate (20), thereby leaving an exposed portion (32) on at least one of the surfaces (30a, 30b) of the conductive element;
- the connecting means (40) are brought into contact with and/or connected to said exposed portion (32).

2.22 Second statement (illustrated by figures 3a, 3b)

An electromagnetic shielding structure comprising:

- a first transparent substrate (20);
- a conductive element (30) deposited on a transparent supporting sheet (31) made of plastic;
- a transparent bonding sheet (22) made of plastic, which ensures that the conductive element (30) is attached to the substrate (20) by joining the supporting sheet (31) to the bonding sheet (22);
- an additional transparent sheet (23), which is attached to the surface of the supporting sheet (31) opposite the one to which the bonding sheet (22) is attached;
- electrical connecting means (40) intended to be connected to the conductive element (30) for grounding the latter;

which structure is characterised in that:

- on at least one of their sides, the supporting sheet (31) and the additional sheet (23) are set back towards the inside of the structure relative to the corresponding free edge of the transparent substrate (20), thereby leaving an exposed portion (32) on at least one of the surfaces (30a, 30b) of the conductive element;
- the connecting means (40) are brought into contact with **and/or** connected to said exposed portion (32).

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citations and explanations supporting such statement**2.23** Third statement (illustrated by figures 4a, 4b)

An electromagnetic shielding structure comprising:

- a first transparent substrate (20);
- a conductive element (30) deposited on a transparent supporting sheet (31) made of plastic;
- a transparent bonding sheet (22) made of plastic, which ensures that the conductive element (30) is attached to the substrate (20) by joining the supporting sheet (31) to the side of the bonding sheet (22) opposite the conductive element;
- a transparent covering sheet (24), which is attached to the surface of the supporting sheet (31) opposite the one to which the bonding sheet (22) is attached and on the conductive element side;
- electrical connecting means (40) intended to be connected to the conductive element (30) for grounding the latter;

which structure is characterised in that:

- on at least one of its sides, the covering sheet (24) is set back towards the inside of the structure relative to the corresponding free edge of the transparent substrate (20), thereby leaving an exposed portion (32) on at least one of the surfaces (30a, 30b) of the conductive element;
- the connecting means (40) are brought into contact with **and/or** connected to said exposed portion (32).

2.24 Fourth statement (illustrated by figure 5)

An electromagnetic shielding structure comprising:

- a first transparent substrate (20);
- a conductive element (30) deposited on the first substrate (20);
- a transparent bonding sheet (22) made of plastic, which covers the conductive element (30);
- a transparent covering sheet (24), which is associated with the bonding sheet (22);

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	<ul style="list-style-type: none">- electrical connecting means (40) intended to be connected to the conductive element (30) for grounding the latter; which structure is characterised in that:- on at least one of its sides, the bonding sheet (22) is set back towards the inside of the structure relative to the corresponding free edge of the transparent substrate (20), thereby leaving an exposed portion (32) on at least one of the surfaces (30a, 30b) of the conductive element, the connecting means (40) being brought into contact with and/or connected to said exposed portion (32). <p>2.3 It appears appropriate that an amended set of claims be filed defining the relevant subject matter in a plurality of independent claims - one for each embodiment, as above - followed by dependent claims covering the optional features.</p> <p>3. <u>Furthermore, irrespective of the above-mentioned lack of clarity, the subject matter of claims 1, 6, 7, 8, 10, 11, 13 and 14 is not novel within the meaning of PCT Article 33(2).</u> <u>Consequently, the requirements of PCT Article 33(1) are not met.</u></p> <p>3.1 Claim 1</p> <p>3.11 Claim 1 is interpreted in accordance with the third statement.</p> <p>D1 (EP-A-1 196 018, cf. figure 3 and column 15, lines 8 to 13), describes (the references between parentheses apply to said document)</p> <p>an electromagnetic shielding structure comprising:</p> <ul style="list-style-type: none">- a first transparent substrate (5);- a conductive element (14) deposited on a transparent supporting sheet (14, PET) made of plastic;- a transparent bonding sheet (11) made of plastic, which ensures that the conductive element (14) is attached to the substrate (5) by joining the supporting sheet (14) to the

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	<p>bonding sheet (11) on the side opposite the conductive element;</p> <ul style="list-style-type: none">- a transparent covering sheet (11), which is attached to the surface of the supporting sheet (14) opposite the one to which the bonding sheet (11) is attached and on the conductive element side;- electrical connecting means (3, electrode) intended to be connected to the conductive element (14) for grounding the latter; <p>which structure is characterised in that:</p> <ul style="list-style-type: none">- on at least one of its sides, the covering sheet (11) is set back towards the inside of the structure relative to the corresponding free edge of the transparent substrate (5), thereby leaving an exposed portion on at least one of the surfaces of the conductive element;- the connecting means (3) are brought into contact with and/or connected to said exposed portion. <p>3.12 Claim 1 is interpreted in accordance with fourth statement. D1 (EP-A-1 196 018, cf. figures 5, 6 and 7), describes (the references between parentheses apply to said document) an electromagnetic shielding structure comprising:</p> <ul style="list-style-type: none">- a first transparent substrate (5);- a conductive element (6) deposited on the first substrate (5);- a transparent bonding sheet (4) made of plastic, which covers the conductive element (6);- a transparent covering sheet (8), which is attached to the bonding sheet (4);- electrical connecting means (3) intended to be connected to the conductive element (6) for grounding the latter; <p>which structure is characterised in that:</p> <ul style="list-style-type: none">- on at least one of its sides, the bonding sheet (4) is set back towards the inside of the structure relative to the corresponding free edge of the transparent substrate (5),

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thereby leaving an exposed portion on at least one of the surfaces of the conductive element, the connecting means (3) being brought into contact with and/or connected to said exposed portion.

3.2 Claim 6

D1, column 15, lines 38 to 42, describes a structure wherein the conductive element is a silver-based metal layer.

3.2 Claim 7

D1, column 15, lines 7 to 12, describes a structure consisting of a grid of conductive wires made of copper.

3.3 Claim 8

D1, "17 electroconductive gasket" in figure 7, describes a structure wherein the connecting means consist of a flat conductor, such as a bus-bar or a strip of conductive foam.

3.4 Claim 10

D1, column 14, lines 45 to 52, describes a structure in which, in a frame-like arrangement, the exposed portion corresponds to the entire periphery of one of the surfaces of the conductive element.

3.5 Claim 11

D1, column 15, lines 7 to 9, describes a structure wherein the supporting sheet is made of PET, a plastic.

3.6 Claim 13

D1, figure 7, describes a structure built into a frame of which the internal portion is made of metal and against which the connecting means extend.

3.7 Claim 14

D1, "2 plasma display panel (PDP)" in figure 7, describes a structure assembled to the front surface of a plasma screen.

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4. In so far as it can be understood, the subject matter of claims 2 to 5, 9 and 12 does not involve an inventive step within the meaning of PCT Article 33(3). Consequently, the requirements of PCT Article 33(1) are not met.

Slight alterations to the construction of the structure described in claim 1 are defined in claims 2 to 5, 9 and 12. Said alterations are part of the standard practice of a person skilled in the art and the resulting advantages are easily foreseeable. Consequently, the subject matter of claims 2 to 5, 9 and 12 does not involve an inventive step.

5. SUGGESTION

The combination of features of claim 1, when the latter is read to cover the first two embodiments (2.21, 2.22), is not found in the prior art and cannot be derived in an obvious manner therefrom.

It appears appropriate that an amended set of claims be filed defining the relevant subject matter in two independent claims, such as those drawn up in points 2.21 and 2.22 above, each followed by its respective dependent claims.

Since the third and fourth embodiments of the invention, as described and represented in figures 4a, 4b and 5, would not be covered by said amended claims, it would be advisable to adapt the description so that these embodiments, not covered by the claims, are presented as illustrative examples to aid the understanding of the invention.